The Attitude and Performance of the Cadets of Maritime Institution during Ship Board Training: An Assessment

Jose M. Barlis Jr., Maritime Academy of Asia and the Pacific, Philippines Josefin D. Fajardo III, Maritime Academy of Asia and the Pacific, Philippines Kathy Dimog, Maritime Academy of Asia and the Pacific, Philippines Marijoy B. Mendoza, Mariveles National High School, Philippines Marise M. Barlis, Mariveles National High School, Philippines

> The Asian Conference on Education 2015 Official Conference Proceedings

Abstract

The feedback coming from the ship officers is vital in order to determine and evaluate the performance of the cadets of the maritime institution so that necessary actions and adjustments are made prior to their embarkation. Shipboard Training is the one year practicum component of the four-year Bachelor of Science in Marine Transportation (BSMT)/ Bachelor of Science in Marine Engineering (BSMarE) programs.

Research made questionnaire was constructed in order to determine the performances of the cadets based on the perceptions and evaluations of their officers on board. A total of one hundred sixty four (164) ship officers on board who directly supervised the performance of the cadets during the international shipboard training for class 2015 are the respondents of the study.

Among the five (5) areas of concern, the attitudes towards colleague got the highest score with very favorable attitudes/ behavior. While knowledge got the lowest mean with favorable attitude/ behavior. It also shows that there is no significant difference on the evaluations of the evaluators when grouped according to position. However, when the evaluators were grouped according to nationality, there are significant differences in terms of attitudes towards colleagues and behavior.

Keywords:

Ship Board Training, Maritime Institution, Cadets, BSMT, BSMarE, Class 2015

iafor

The International Academic Forum www.iafor.org

I. Introduction

Shipboard training is a mandatory requirement and component of the Bachelor of Science in Marine Transportation (BSMT) and Bachelor of Science in Marine Engineering (BSMarE) programs that pertains to the required seagoing service as provided under Regulation II/1 and Regulation III/1 of the Standards of Training, Certification and Watch keeping (STCW) Convention. This requirement aims to ensure that every BSMT and BSMarE student shall have the opportunity to undergo an approved seagoing service of not less than twelve (12) months which includes onboard training that meets the requirements of Section A-II/1 of the STCW Code documented in an approved training record book (TRB) and perform, during the required seagoing service, bridge watch keeping duties under the supervision of the master or a qualified officer for a period of not less than six (6) months for BSMT cadet students. While for BSMarE, the students must undergo a combined workshop skills training and an approved seagoing service of not less than twelve (12) months which includes onboard training that meets the requirements of Section A-III/1 of STCW Code documented in an approved TRB and perform, during the required seagoing service, engine-room watch keeping duties under the supervision of the chief engineer officer or a qualified engineer officer for a period of not less than six (6) months (Commission on Higher Education Memorandum Order No. 2 Series of 2012, CMO No. 2, S. 2012). During the shipboard training the cadets are expected to acquire the skills required to be a good officer by getting hands-on experience of various shipboard tasks, develop confidence by acquiring the knowledge of the general principles and operating instructions of equipment on a ship, and develop basic instincts of good seamanship (International Maritime Training Centre).

One of the most important benefits of shipboard practical is that cadets are able to learn through practical exercises by doing various jobs on board ships. The exposure of cadets to the working environment during shipboard training will enable them to realize and understand the job requirements on board merchant vessels. They are able to show their capabilities, gain confidence, and test their effectiveness and productivity upon training on board.

As future seafarers, cadets learn through doing the job, experiencing the same problems that they may encounter when they become officers on board. Cadets are permitted to work at their own speed, thereby gaining confidence and a sense of productiveness. If they learn in the actual work environment, an understanding of the job and opportunity to correct errors before they become established is assured.

According to Siang (1998) as cited in the UKESSAYS, learning process occurs as the result of interaction between the dealing with ship officers and cadets through feedback whether positive or negative.

Moreover, on the part of the institution, it is a requirement to all Higher Education Institutions (HEIs) offering BSMT and/or BSMarE program to ensure that qualified students completing the academic requirement for their bachelor's degree are provided with opportunities to get cadetship/apprenticeship through linkages or partnership with manning/ shipping companies. (Section 4. CMO No. 2 Series 2012).

However, cadets are only assessed after the shipboard training based on their Training Record Book and evaluated by the shipboard training officer, the dean of academics and function heads of their respective institution. Immediate feedback coming from officers on board are given less consideration to evaluate the performance of the cadets during onboard ship. Therefore, it is deemed necessary to get the immediate feedback of the ship officers in charge during the shipboard training of cadets in order to address their concerns and make necessary actions on the part of management of the maritime institution.

1.1 Research Question

The study analyzed the attitude and performance of the cadets during shipboard training as perceived by the ship officers.

Specifically, the study sought answers to the following questions:

- 1. How may the demographic profile of the respondents be described in terms of:
 - 1.1 Position and
 - 1.2 Nationality?
- 2. How may the attitudes and performance of the cadets during shipboard training as evaluated by the ship officers be described in terms of:
 - 2.1 Attitudes towards work,
 - 2.2 Attitudes towards colleagues,
 - 2.3 Knowledge,
 - 2.4 Behavior and
 - 2.5 Physical Attribute?
- 3. How may the factors affecting the attitude and performance of cadets during shipboard training correlate to one another?
- 4. Which among the factors taken singly or in combination greatly affect the level of attitude and performance of cadets during shipboard training as perceived by the respondents?

II. Review of literature

On January 26, 2012, the CHED issued the Implementing Guidelines on the Shipboard Training Requirement for the Bachelor of Science in Marine Transportation (BSMT) and Bachelor of Science in Marine Engineering (BSMarE) Programs.

The CHED Memorandum Order No. 2 Series of 2012 used as the implementing guidelines on the shipboard training requirement for a Bachelor's degree in Marine Transportation or in Marine Engineering, respectively to be qualified for certification as an Officer-In-Charge of a watch.

Pursuant to the STCW Convention and code, shipboard training shall be categorized into either (a) twelve (12) months seagoing service or (b) by thirty six (36) moths seagoing service that could be undertaken by BSMT and BSMarE cadet student in order to complete the requirements for the conferment of a Bachelor's degree in Marine Transportation or in Marine Engineering, respectively and to be qualified for certification as an officer in charge of a watch (CHED Memorandum Order 02, Series 2012, Article II, Section 3).

In the study of Felicia et al. (2010), it stated that feasible method of developing competitiveness is through training and long-life learning. Training is delivered for undergraduates (future seafarers) in maritime schools and universities and after graduation in maritime training centers and in the employing company. A particular attention must be given to transmission of adequate knowledge for gaining competences and abilities and not only theoretical insights.

On the article Lack of shipboard training blamed on colleges (2014), it states that absence or lack of shipboard training continues to be one of the greatest hindrance in achieving the dreams of Filipino maritime cadets to become merchant marine officers.

Likewise, in the study of Barranta (2011), he found out that Filipino seafarers have generally high and positive attitude towards work environment because the physical environment aboard the ship provides them with better appreciation of standard work performance as well as general feeling of safety and healthy working environment. Their emotional attitude is generally highly positive because they have the feeling of self-confidence, calmness and clear thinking moments. Their social attitude is highly positive because they have less fear and inferiority complex. They believe that the work environment promotes pleasant and harmonious relationship with people.

The above studies are related to the present study since it focused more on the performance of the cadets during ship board training. The aforementioned studies examined the minimum requirement for the compliance of the degree in BSMT and BSMarE. Likewise, different issues were raised on the implementation of shipboard training and its implication to the cadets.

III. Methodology

1.1 Methods and Techniques

The study is a combination of quantitative and qualitative research. Respondents were given survey questionnaire to gather information based on their evaluation on the performance of the cadets respondents which divided into five (5) areas of concerns. Each cadet was given a survey questionnaire to be answered by their respective officers on board. It is required to all answered questionnaire to have a signature or stamp by their officers and have it scanned before returning it to the researchers to eliminate fraud and deceitful data.

Descriptive Statistics is concerned with the collection, organization, presentation, analysis, and the interpretation of data to assess group characteristics. Descriptive Normative Approach is concerned with the percentage distribution of the respondents, the typical characteristics of the group, relationships of the characteristics, and the strength of these relationships. Under this type of research, measures of central tendencies, variability, and location are most commonly used.

A self-made questionnaire was used to determine the perceptions and evaluations of the ship officers towards the performance and attitudes of the cadets during shipboard training. The said questionnaire was divided into five (5) areas of concerns namely: attitudes towards work, attitudes towards colleagues, knowledge, behavior and physical attributes. Each questionnaire was sent to all on board cadets of the maritime

institution for class 2015 using yahoo mail, facebook, gmail and other social networking sites.

1.2 Population of the Study

Table 1 shows the distribution of respondents by nationality and position on board ship.

Table 1
Population of the Study
By Nationality

Nationality	Frequency	Percent
BRITISH	1	0.6
CROATIAN	6	3.7
FILIPINO	104	63.4
INDIAN	8	4.9
ITALIAN	8	4.9
JAPANESE	16	9.8
MYANMAR	1	0.6
POLISH	6	3.7
RUSSIAN	5	3.0
SWEDISH	2	1.2
UKRAINIAN	7	4.3
Total	164	100.0

It can be gleaned from the table that the study employed one hundred sixty four (164) ship officers as respondents according to their nationality. Wherein one hundred four (104) or 63.4% are Filipinos, sixteen (16) or 9.8% are Japanese, eight (8) or 4.9% are Indians and Italians, seven (7) or 4.3% are Ukrainians, six (6) or 3.7% are Croatians and Polish, five (5) or 3% are Russians, two (2) or 1.2% are Swedish and one (1) or 0.6% is Myanmar and British.

By Position

Position	Frequency	Percent
Captain/C/E	52	31.7
CM / 2E	41	25.0
2M / 3E	46	28.0
3M / 4E	24	14.6
Electrician/Others	1	0.6
Total	164	100.0

It can be gleaned from the table the frequency of respondents when grouped according to their position. Fifty two (52) or 31.7% are Captains or Chief Engineer, forty one (41) or 25% are Chief Mates or Second Engineers, forty six (46) or 28% are Second Mates or Third Engineers, twenty four (24) or 14.6% are Third Mates or Fourth Engineers, while one (1) or 0.6% is Electrician or other ship officer.

1.3 Conceptual Framework

This study identified the performance of the cadets during shipboard training in terms of attitudes towards work, towards colleagues, knowledge, behaviour and physical attributes as the independent variables. The dependent variable considered is the evaluation of ship officers in charge during the shipboard training of the cadets. Fig 1 shows the independent and dependent variables used in the study.

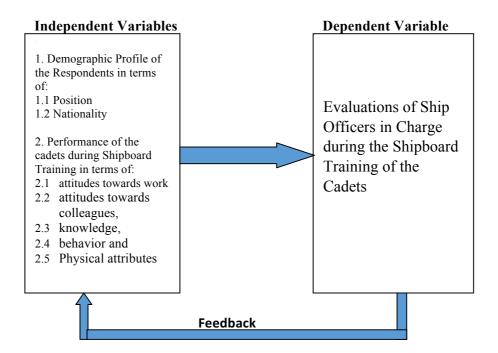


Figure 1. Paradigm of the study

Hypotheses of the Study

The following hypotheses were tested:

- 1. The demographic profile of the respondents has no significant effect to the evaluations of the cadets during shipboard training.
- 2. The performance of the cadets during shipboard training received very unfavorable attitude/behavior (very negative) based on the evaluation by the ship officers in charge.

1.4 Construction and Validation of Instruments

The assembly of the survey-questionnaire utilized in this study was based from various similar studies. Nonetheless, the experience of the researchers as facilitators and with the help of the experts in the field contributed a lot in the formulation of the questions for this study.

The proficiency of the Dean of Academics in the maritime institution, the English instructors, the members of alumni and some forms of Department of Shipboard Trainings, were solicited for the validity and reliability of the questionnaire.

1.5 Statistical Treatment of Data

The data obtained gathered through questionnaires was encoded and was subjected to appropriate statistical treatment to answer the specific research questions of this study.

Mean and standard deviation were utilized to show the performance and attitudes of the cadets during shipboard training.

Also, mean, standard deviation, and frequency counts were utilized to reflect the comparison of attitude/ behaviour of the Cadets when grouped according to nationality and position of evaluators.

Independent samples t-test and analysis of variance (ANOVA) were employed to determine the relationship of the attitude and performance of the cadets when the respondents were grouped according to their nationality. Independent samples t-test was used for profile variables with only two (2) categories while ANOVA or F-test was used for more than two (2) groups. Hence, LSD test was used to specify significant mean differences of groups after ANOVA results suggest that significant difference exists.

Further, Pearson correlation was used to explain the relationship between the areas of concern of the study namely: the attitudes towards work, attitudes towards colleagues, knowledge behaviour and physical attributes. For easier interpretation of the Pearson correlation coefficients (r), this study adopted the following according to Sevilla, et.al. (1992) as cited by Alayon (2014)

Coefficient	Interpretation
$\pm 0.80 - \pm 1.0$	high correlation
$\pm 0.60 - \pm 0.79$	moderately high correlation
$\pm 0.40 - \pm 0.59$	moderate correlation
± 0.20 - ± 0.39	low correlation
±0.01 -±0 .19	negligible correlation

The probability values (p-values) are then compared to 0.05, which is set as the critical value for the hypotheses testing prior to the conduct of this study. If the p-value is equal or less than 0.05, then the statistical value is significant and so null hypothesis is rejected. Otherwise, the null hypothesis is not rejected.

IV. Results and discussions

1. Demographic Profile of the Respondents

Table 1 shows the distribution of respondents in terms of nationality and position. It can be gleaned from the table that Filipino crew/ ship officers got the highest number of respondents with 63.4% followed by the Japanese with only 9.8%, both Italian and Indian got 4.9%, while Ukrainian got 4.3% and the rest got 12.8% comprising British, Croatian, Myanmar, Polish, Russian and Swedish.

It only shows that the Philippines is the world's premier supplier of qualified and competent seafarers and one third of seafarers worldwide are Filipinos (Rimando 2013). The Philippines is the premiere provider of competent and certificated seafarers in the international seaborne trade, accounting for more than 25% of the total crew requirements on board international merchant marine vessels, performing management and operational functions as well as support services on ships of various types, categories and sizes (Executive Order No. 75, s. 2012). Further, majority of the respondents in terms of their position are Chief Engineer or Captains with 31.7% followed by Second Mate or Third Engineer with 28.0% and Chief Mate or Second Engineer with 25.0%. It only shows that the management levels onboard ship are concerned with the performance of their cadets on board. Management level participated in the survey to determine the strengths and weakness of their trainees. Ship officers have the critical role of evaluating and providing feedback on cadets' performance. Feedback is one of the basis of maintaining good performance and improving unsatisfactory performance of subordinates. Without feedback, cadets are left hanging about how their supervisors view them and their performance as well.

2. Evaluation of the Ship officers on the Attitudes and Performance of the cadets during shipboard training

Table 2 shows the mean evaluation of the respondents in five areas of concern. Among the five (5) areas of concern, the attitudes towards colleague got the highest score with 4.63 mean with very favorable attitudes/ behavior in terms of that the cadet is easy to be with and has the willingness to mingle with other co-workers. While the knowledge area got 4.24 mean score that made it the lowest mean within the five (5) areas.

Table 2. Mean Evaluation of Respondents in Five Areas of Concern

AREAS OF CONCERN	Mean	Descriptive Equivalent
Attitudes towards work	4.34	FA
1. The cadet is always on time during his duty hours.	4.59	VFA
2. The cadet is willing to render additional hours in case of needs.	4.58	VFA
3. The cadet has initiative to perform other tasks.	4.23	FA
4. The cadet is resourceful.	4.33	FA
5. The cadet feels accountable towards his duties.	4.23	FA
6. The cadet needs less supervision and is trustworthy.	4.10	FA
Attitudes towards colleagues	4.63	VFA
1. The cadet is easy to be with.	4.66	VFA
2. The cadet has the willingness to mingle with other co-workers.	4.66	VFA
3. The cadet can work cooperatively with the crew.	4.65	VFA
4. The cadet participates in social gatherings.	4.58	VFA
5. The cadet maintains good rapport with his colleagues.	4.58	VFA
6. The cadet displays patience to his colleagues.	4.63	VFA
Knowledge	4.24	FA
1. The cadet has the ability to perform tasks assigned to him.	4.29	FA
2. The cadet is theoretically prepared by the institution.	4.15	FA
3. The cadet has the knowledge in his assigned task.	4.15	FA
4. The cadet executes instructions immediately and accurately.	4.20	FA
5. The cadet corrects errors which are done incorrectly.	4.22	FA

6.	The cadet is aware of his duties and responsibilities.	4.41	FA
Beh	avior	4.46	FA
1.	The cadet is obedient to his superior	4.65	VFA
2.	He follows instructions and command without questioning his superior	4.40	FA
3.	The cadet is not defiant on instructions he does not agree.	4.40	FA
4.	The cadet does not argue to his superior on the decisions made	4.41	FA
	by his superior		
5.	The cadet observes punctuality in his scheduled tasks.	4.45	FA
6.	The cadet responds to instructions promptly.	4.42	FA
Phy	Physical Attributes		FA
1.	The cadets displays strength and enthusiasm in doing his work.	4.55	VFA
2.	The cadet did not have any illness or sickness.	4.64	VFA
3.	The cadet do exercise regularly to maintain good health.	4.46	FA
4.	The cadet attends regular consultation with the doctor.	3.89	FA
5.	The cadet takes his rest on scheduled time.	4.28	FA
6.	The cadet gets enough sleep prior to his next duty schedule.	4.34	FA
	Overall	4.41	FA

Scale of Mean	Descriptive Equivalent
4.50 - 5.00	Very Favorable Attitude/Behavior (Very Positive)
3.50 - 4.49	Favorable Attitude/Behavior (Positive)
2.50 - 3.49	Neither Favorable nor Unfavorable Attitude/Behavior (Neutral)
1.50 - 2.49	Unfavorable Attitude/Behavior (Negative)
1.00 - 1.49	Very Unfavorable Attitude/Behavior (Very Negative)

Based on the findings, it only means that ship officers believed that the cadets have very favorable attitude/ behavior in terms of their attitudes towards their colleagues. Since the number of people working on board is limited, it is necessary for them to try to know each other in order to understand the values, knowledge and skills each one possesses. In this way, creating interpersonal relationship among each other on board ship is developed. It is important to enhance interpersonal relationship between people on board to ensure that all jobs are done smoothly and safety.

Also, the cadets were trained and accustomed to be flexible and learn how to adjust in dealing with other people since they were exposed to different personalities, attitudes, behaviors, and cultures during their academic year in the Academy.

In the case of the cadets, since they are the apprentice, it is important for them to mingle with their colleagues that will act as co-trainers and assessors. This includes transferring of knowledge and skills, and assessing behavior and attitude. Their colleagues will act as reflectors, supervisors and providers of feedback.

A British Captain also said, "if the cadet continues to apply himself with the same dedication and consciousness towards his duties and responsibilities, then I am certain that he will develop into a fine ship officer."

Likewise, one Indian First Engineer stated "Engine cadet is good in his duties and needs some extra hard work to learn the things fast. He performs well in his duties and shows interest on his working environment."

Another remarks from a Croatian Officer said "He has good motivation in learning bridge work even if his routine is only day work, hope he continues being motivated and focused in his studies to become future officer in our company."

In addition, in terms of knowledge, a positive mark of favorable attitude/behavior based on the evaluation of the ship officers, hence got the lowest score among the areas of concerns. In terms of knowledge, the cadet is theoretically prepared by their institution and that the cadet has the knowledge in his assigned task got the lowest mean (4.15) among the areas of knowledge. One factor to consider may be the transition of professional instructors or changing of instructors teaching professional courses within the semester. It has been observed that the maritime professionals who are active seafarers teaching in the maritime institution are those faculty members who did not stay longer in the Academy especially the younger ones. Most of them stayed only for two (2) to five (5) months and then they will leave the academy to board their respective ships and sea duties in the middle of the semester that affects the learning of the students.

According to Filipino 2nd officer, "deck cadet performs his duties well. My only suggestions are to study harder specially in navigation, bridge and navigational equipment, duties of safety and navigating officer and cargo handling."

Similarly with the observation of Filipino a First Engineer, "engine cadet needs to read manuals, piping diagrams and electric circuit diagrams to enhance his knowledge", "more exposures required at the bridge operation" as suggested by Second Mate from the Philippines; and "the cadet must be prepared prior to his shipboard training" according to a Second Assistant Engineer.

Furthermore, maritime instructors were not taught and exposed on how to teach and deliver the lessons properly. They were not also expose in the basic principles in teaching, the assessment and measurement, the different methods, and the andragogy in teaching. To address this problem, the International Maritime Organization (IMO) created model courses to assist maritime training institutes and their teaching staff in organizing and introducing new training courses or in enhancing, updating or supplementing existing training material where the quality and effectiveness of the training courses may thereby be improved. In which, one of the model courses is the IMO Model Course 6.09, Training Course for Instructors.

The purpose of the IMO model course 6.09 is to help Technical Training and Instruction Centers, as well as its teaching personnel not in possession of a university degree in teaching, in the organization and presentation of new courses, or to increase, update or complement the existing training material. Though this way the quality and effectiveness of these instruction and training courses may be improved (STCW 95, section A-I/16, IMO model course 6.09).

Table 3 shows the comparison of attitudes/ behaviour of the cadets as perceived by the respondents when grouped according to their nationality. It is assumed that there is no significant difference between the evaluation of the three (3) groups on the attitude/ behaviour of the cadets during their shipboard training.

Table 3. Comparison of Attitude/Behaviour of the Cadets when Grouped according to Nationality of Evaluators

Amagaaf	Nationality of		Descrip	tive		ANO	ANOVA	
Areas of Concern			Mean	Std. Deviation	F-value	Sig.	Remarks	
Attitudes	Filipino	104	4.37	0.46			Not significant	
towards	Other Asian	30	4.26	0.55	0.56	105/41	Not significant Do not reject Ho	
work	European	30	4.35	0.46			Do not reject no	
Attitudes	Filipino	104	4.61	0.43			Cionificant	
towards	Other Asian	30	4.49	0.41	5.91	0.003	Significant Reject Ho	
colleagues	European	30	4.84	0.29			Reject no	
	Filipino	104	4.24	0.51		1 (1) 1 /(1)	Not significant Do not reject Ho	
Knowledge	Other Asian	30	4.11	0.58	1.79			
	European	30	4.36	0.46			Do not reject mo	
	Filipino	104	4.42	0.50			O22 Significant Reject Ho	
Behavior	Other Asian	30	4.39	0.52	3.92	0.022		
	European	30	4.68	0.41			Reject 110	
Physical	Filipino	104	4.35	0.52			Not significant	
Attributes	Other Asian	30	4.34	0.60	0.48	1116/1	Do not reject Ho	
Attitutes	European	30	4.46	0.47			Do not reject mo	
	Filipino	104	4.40	0.42		Not significant		
overall	Other Asian	30	4.32	0.50	/ IIX III /X		Not significant Do not reject Ho	
	European	30	4.54	0.35			Do not reject no	

It can be gleaned from table that in terms of attitudes towards work, the three (3) groups have the same evaluations on the attitude/ behaviour of the cadets during ship board training which is favourable attitude/ behaviour with 0.574 significance which means that the null hypothesis is accepted. Furthermore, in terms of knowledge and physical attributes, all the three groups agreed that the cadets have favourable attitude/ behaviour; therefore, the null hypothesis is also accepted. However, in terms of attitudes towards colleagues and behaviour of the cadets, there are significant differences on the evaluations of the respondents. The first has 0.003 significance while the latter has 0.022 significance which means that the null hypothesis is rejected..

It only means that discrimination among crew members with different nationalities still observed on board. According to Prof. Lane et. Al as cited in Eurekaler.org (2003), they find little evidence of discrimination against particular nationalities, although there were disturbing exceptions. Crews seemed to be divided more strongly on the lines of nationality and sometimes occupational hierarchies were re-aligned on board to coincide with nationality rather than rank.

Table 4. LSD Test Result for Significant Means

Areas of Concern	Nationality of Evaluators	Mean ¹	LSD ² .05
	European	4.84	a
Attitudes towards colleagues	Filipino	4.61	b
_	Other Asian	4.49	b
	European	4.68	a
Behavior	Filipino	4.42	b
	Other Asian	4.39	b

Mean perception of the three (3) groups of nationalities

Based on the result of Table 4, it shows that the two areas of concern namely attitudes towards colleagues and behaviour have significant difference on the evaluation of the ship officers. To determine which among the variables greatly affect to one another, LSD was used.

It shows that the mean evaluations of Europeans on attitude towards colleagues is significantly higher compared to that of Filipinos and other Asians while Filipinos and other Asians do not differ in mean evaluations significantly. The same findings with the mean of the Europeans on behaviour is also significantly higher compared to that of Filipinos and other Asians while Filipinos and other Asians do not differ in their mean evaluation significantly.

Table 5 shows the mean evaluations of the respondents as grouped according to their positions. The respondents were grouped into two (2) namely: management level that includes the Captain, Chief Engineer, Chief Mate, and Second Engineer and the operational level comprised of the Second Mate, Third Engineer, Third Mate, Fourth Engineer and the electrician.

It is assumed that there is no significant difference between the evaluations of the management and operational level on the performance of the cadets during shipboard training.

² Treatment means with common letter/s is/are not significantly different at 5% level of significance

Table 5. Comparison of Attitude/ Behaviour of Students when Grouped according to Position of Evaluators

Areas of	Position of	Descriptives			T – Test		
Concern	Evaluators	N	Mean	Std. Deviation	F-value	Sig.	Remarks
Attitudes	Management	93	4.29	0.53	1 (5	0.100	Not significant
towards work	Operational	71	4.41	0.39	1.65	0.100	Do not reject Ho
Attitudes	Management	93	4.59	0.44			Not significant
towards colleagues	Operational	71	4.68	0.37	1.46	0.147	Do not reject Ho
Knowledge	Management	93	4.22	0.58	0.54	0.592	Not significant
Kilowiedge	Operational	71	4.26	0.42	0.54	0.392	Do not reject Ho
Behavior	Management	93	4.47	0.52	0.31	0.760	Not significant
Deliavioi	Operational	71	4.45	0.46	0.31	0.700	Do not reject Ho
Physical	Management	93	4.33	0.56	1.09	0.279	Not significant
Attributes	Operational	71	4.42	0.48	1.09	0.279	Do not reject Ho
orranal1	Management	93	4.38	0.48	0.94	0.247	Not significant
overall	Operational	71	4.44	0.35	0.94	0.347	Do not reject Ho

It can be gleaned from the table that both of them, the management and operational level have no significant difference in their evaluations of the attitude/ behaviour of the cadets in five (5) areas of concerns during their shipboard training. Both of them perceived that the attitudes of cadets towards work has favourable attitude/ behaviour with 4.29 and 4.41 mean respectively. While in terms of attitudes towards colleagues, both of them gave very favourable attitude/ behaviour having 4.59 and 4.68 mean scores at 0.147 significance. On the other hand, in terms of knowledge, the management level group gave 4.22 mean score while 4.36 mean received from the operational level group at 0.592 significance with favourable attitude/ behaviour. In terms of behaviour, with 0.760 significance, it marked that both groups agreed that the cadets have favourable attitudes/ behaviour with 4.47 and 4.45 mean scores, and lastly, on the physical attributes, with 0.279 significance, both groups gave favourable attitudes/ behaviour to the cadets.

It only means that in totality, both groups, the management and the operational level have no significant differences in their evaluations towards the attitude/ behaviour of the cadets with 4.33 and 4.44 mean scores with significance of 0.347. Both of them perceived that the cadets have positive or favourable attitudes/ behaviour. Therefore, the null hypothesis that there is no significant difference on the evaluations of the respondents is accepted.

3. Correlation Matrix on the Attitudes and Performance of the Cadets during their Shipboard Training

Table 6. Correlation Matrix on the Attitudes and Performance of the Cadets during Shipboard Training

	Attitudes towards work	Attitudes towards colleagues	Knowledge		Physical Attributes
Attitudes towards work	1	0.68**	0.81**	0.77**	0.70**
Attitudes towards colleagues		1	0.67**	0.69**	0.64**
Knowledge			1	0.79**	0.71**
Behavior				1	0.71**
Physically Fit					1

**. Correlation is significant at the 0.01 level (2-tailed).

Correlation coefficient Interpretation $\pm .80 - \pm 1.0$ high correlation $\pm .60 - \pm .79$ moderately high correlation $\pm .40 - \pm .59$ moderate correlation $\pm .20 - \pm .39$ low correlation

 $\pm .20 - \pm .39$ low correlation $\pm .01 - \pm .19$ negligible correlation

Evidently, the different areas of concerns on the attitude/ behaviour of the cadets are inter-correlated or are affecting each other as indicated by their correlation coefficients with each other. Pearson R correlation is used to determine the relationship of two (2) variables.

Based on table 6, knowledge is correlated highest with attitude towards work having a high correlation coefficient of 0.81 which implies that these two (2) variables have a coefficient of determination or R-squared value of 0.66. The R-squared value of 0.66 indicates that 66% of the variability in the knowledge is shared with attitude towards work while the other 34% is shared with other areas of concern. This result suggests that knowledge greatly affects the performance of the cadets.

Furthermore, attitudes towards colleagues is also most associated with behaviour having a moderately high correlation of 0.69 suggesting a 47% shared variance by these two (2) variables.

Moreover, knowledge is most correlated with behaviour (R = 0.79) and then to physical attributes (R = 0.71).

To add, physical attributes is associated most with knowledge and behaviour having a moderately high correlation coefficient of 0.71 and R-squared value of 0.50 with 50% shared variance.

V. Conclusions

- 1. The hypothesis that the demographic profile of the respondents in terms of nationality has significant difference to the evaluation on the attitudes and performance of the cadets during shipboard training is accepted. While in terms of position, it shows that there is no significant difference.
- 2. The performance of the cadets during shipboard training received favorable attitude/behavior (positive) evaluation.
- 3. Among the areas of concerns, it shows that the attitudes towards their colleagues got the highest mean score while the knowledge area received the lowest mean score.

VI. Recommendations

- 1. The management of the maritime institution may establish a policy for a minimum length of service to all maritime professionals before leaving the academy for their sea service duty so as not to affect and hamper the delivery of the lessons to the cadets.
- 2. The management of the maritime institution may consider the entry requirements to all maritime professionals like IMO model courses 6.09, 3.12 and 6.10 prior to their teaching assignments for them to be able to have the knowledge in different teaching methodologies and techniques that may be helpful in the delivery of the lessons.
- 3. It is also recommended to triangulate the findings of the study to the evaluation conducted by the officers in the maritime institution using the Training Record Book to validate the evaluations of the ship officers.
- 4. The management may consider enhancing the character development of the cadets through leadership enhancement at the academy. With this, the ruling class may lead their subordinates in steering extra curricular activities.
- 5. The management may reconsider reviewing the effectiveness of present character development program in the academy that they are offering to determine whether the existing program is still applicable in the present situations/ conditions of the learners.
- 6. Since the academy is in the transition on the implementation of the outcomes based education and competencies set by Standards of Training, Certification and Watchkeeping (STCW), the management may check if the cadets are now compliant with the said competencies through the integration and implementation of Competency Management System in all courses offered in the academy.
- 7. Other variables may be used to determine the evaluations of the ship officers on the performance and attitude of cadets taking shipboard training.

VII. References

Alayon, C. M. (2014). Level of Effectiveness of the Academic Ramp Program (ARP) in Physics. (Unpublished Master's Thesis in the Bataan Peninsula State University, City of Balanga, Bataan, Philippines).

Barranta Jr. C. (2011). Emotional Intelligence and Personality of Filipino Seafarers and their Attitude towards Work Environment. (Unpublished Master's Thesis in Asian Institute of Maritime Studies, Pasay City, Philippines).

CHED Memorandum Order (CMO) No. 02, Series 2012 (2012). Implementing Guidelines on the Shipboard Training Requirement for the Bachelor of Science in Marine Transportation (BSMT) and Bachelor of Science in Marine Engineering (BSMarE) Programs. Quezon City, Philippines. January 26, 2012.

Eurekalert, The Global Source for Science News. Mixed-nationality ships work 'surprisingly well' study (though speaking English means fewer jokes!). January 2003. http://www.eurekalert.org/pub_releases/2003-01/cu-msw012403.php. Date Retrieved: January 21, 2015.

International Maritime Training Centre. Structured Shipboard Training Programme.http://www.wilhelmsen.com/services/maritime/companies/IMTC/Courses/SpecialCourses/Pages/Structuredshipboardtrainingprogramme.aspx . Date Retrieved: January 11, 2015

International Shipping News 04/08/2014. Lack of shipboard training blamed on colleges. http://www.hellenicshippingnews.com/lack-of-shipboard-training-blamed-on-colleges/. Date Retrieved: January 7, 2015.

Melgar, N., Rossi M. and Smith T (2008). Individual Attitudes towards Others, Misanthropy Analysis in a Cross – Country Perspective. Departamento de Economia. http://www.fcs.edu.uy/archivos/1208.pdf. Date Retrieved: December 8, 2014.

Rimando M. (2013). Preventing Seafaring Dreams from Turning into Nightmares. Decent Work for All Monthly News Update. Makati City, Philippine.

The Maritime Labour Convention. A Seafarers' Bill of Rights. An ITF Guide for Seafarers to the ILO. Maritime Labour Convention, 2006. The International Transport Workers' Federation (ITF) 49-60 Borough Road, London SE1 1DR, UK. http://www.itfseafarers.org/files/publications/23556/SBoR_English_inside_small.pdf. Date Retrieved: January 21, 2014.

Felicia S, Cristina N, Geanina C (2010). Impact of Seafarers Training on Crew Personnel Strategy and Competitiveness. Maritime Transport & Navigation Journal, Vol. 2(2010), No. 2.

http://www.ronomar.ro/resource/maredu/issue2_paper8.pdf. Date Retrieved: January 7, 2015.

Official Gazette. Executive Order No. 75, s. 2012. Designating the department of Transportation and Communications (DOTC), through the Maritime Industry Authority, as the Single Administration in the Philippines Responsible for the Oversight in the Implementation of the 1978 International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, as Amended. City of Manila, Philippines. April 30, 2012.

UK Essays. The Alam Training Programmes Education Essay. http://www.ukessays.com/essays/education/the-alam-training-programmes-education-essay.php. Date Retrieved: December 27, 2014.